PV MODULE MANUFACTURING SOLUTIONS
MACHINES FOR EVERY STEP OF THE PRODUCTION LINE

WWW.ECOPROGETTI.COM
Examples of PV panel installations made with Ecoprogetti machines
Ecoprogetti is the only 100% European company to design, produce and deliver complete turnkey production lines for the assembly and quality testing of high efficiency photovoltaic panels. Founded in 1998 Ecoprogetti is in the TOP 5 photovoltaic machine manufacturers for worldwide capacity.

SPECIALIZED IN MACHINES AND TURN-KEY LINES FOR PHOTOVOLTAIC MODULE PRODUCTION.

ECOPROGETTI NUMBERS & FACTS

+26 GW production capacity supplied worldwide

+150 Employees worldwide

+170 Turnkey production lines delivered

25 Years of Ecoprogetti

5 Service Offices worldwide
SINCE 1998

Ecoprogetti has a long history of more than 25 years both in production process and production of machines. Our portfolio of machines is complete, from the beginning to the end of the module production process.

MADE IN ITALY

All Ecoprogetti machines are engineered, assembled and tested in Ecoprogetti’s HQ in Italy with the highest European standards and EU made components.

TECHNOLOGY INNOVATION

With extensive practical experience and with a dedicated R&D center Ecoprogetti can develop machines to work with the latest technologies on the market, such as HJT, N-type TOPCon, Perovskite tandem and much more.
ECOBUSSING A - AUTOMATIC BUSSING

The ECOBUSSING A performs the induction soldering of the interconnections between the strings of solar cells. The machine cuts and bends the ribbons of the chosen size and shape. The induction soldering is compatible with any bus bar/wire number and it uses Ecoprogetti’s patented soldering system. Fully compatible to work on centralized panels.
500MW HC - FULLY AUTO PRODUCTION LINE
COMPLETE SOLUTION FOR PV MODULE MANUFACTURING

- Glass loader
- Glass marker
- EVA Cutter & Placer
- EPE Stripe placer
- Buffer system
- Stringer machine
- Robotic pick & place
- Automatic Bussing
- EVA Cutter & Placer
- Back-sheet Cutter & Placer
- 2nd Glass loader
- EL tester (pre-lamination)
- Laminator
- Fully auto trimming
- Fully auto framing
- Fully auto J-box
- Fully auto Potting
- Curing tunnel
- Fully auto Grinding
- LED sun simulator
- EL tester (post-lamination)
- Hi-pot tester
- Visual inspection
- Fully auto labels printer
- Fully auto Corners placer
- Packing and Sorting

ECOPROGETTI MES, Ecoprogetti’s Traceability System, from Order to Final product.
Consists in: Grading of PV panels and sorting accordingly; Raw Material Tracking & Bill of Materials; Digitalized plant reports; ERP integration

- 500 MW/Year
- 100 panels/h
- 3 workers per shift
- 600 kW/h
- 6bar | 7800 nL/1'
- 3800 sqm
- area required

HALF CELL

M10 - M12
182mm - 210mm
550-600 W
per module

- 3 shifts of 8 hours
- 330 days/year

LINE

- TURNKEY LINES
- FULLY AUTO
- COMPLETE SOLUTION FOR PV MODULE MANUFACTURING
- 500MW HC
- FULLY AUTO PRODUCTION LINE
- 500MW HC - FULLY AUTO PRODUCTION LINE
- COMPLETE SOLUTION FOR PV MODULE MANUFACTURING
20MW MODULE PV PRODUCTION LINE

- 20 MW/Year
- 10 panels/h
- 5 workers per shift
- 150 kW/h
- 750 sqm area required
- 6bar | 900 nL/1'

100MW HC SMART - SEMI AUTO PV MODULE PRODUCTION

- 100 MW/Year
- 25 panels/h
- 8 workers per shift
- 200 kW/h
- 1300 sqm area required
- 6bar | 2600 nL/1'

200MW HC NEXT - FULLY AUTO PV MODULE PRODUCTION

- 200 MW/Year
- 50 panels/h
- 4 workers per shift
- 300 kW/h
- 3000 sqm area required
- 6bar | 4700 nL/1'
STRINGER MACHINES FOR YOUR PV PANEL PRODUCTION

Ecoprogetti’s infrared stringer machines are designed to solder mono-Si and poly-Si solar cells into strings at a throughput of 2500 cycles/hour. The stringer machine can work with cells’ sizes from 166 to 210 mm (9 to 12 BB/Wire) full, half-cut and 1/3-cut.

**ETS 4000 - MBB STRINGER MACHINE**

**COMPATIBLE WITH ALL SOLAR CELLS’ SIZES**

<table>
<thead>
<tr>
<th>M6</th>
<th>M10</th>
<th>G12</th>
<th>UPGRADED SOLAR CELLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>166 mm</td>
<td>162 mm</td>
<td>210 mm</td>
<td>230 mm</td>
</tr>
<tr>
<td>9 Bus Bar</td>
<td>10-11 Bus Bar</td>
<td>12 Bus Bar</td>
<td>16 Bus Bar</td>
</tr>
</tbody>
</table>

**COMPATIBLE WITH FULL & HALF SOLAR CELLS**

COMPATIBLE WITH 9-10-11-12 BB/WIRE

EMBEDDED CELL LASER SCRIBER
COMPLETE TRAINING SESSIONS, FULL KNOW-HOW TRANSFER

We provide our expertise on PV module production, covering each step of the production, costs optimization and certification of the PV modules. The training provided guarantees that our clients will be able to produce Tier-1 PV modules.

We guarantee tailored consultation for any inquiry involving the making, enhancement, installation and certification of photovoltaic modules.

SERVICE WORLDWIDE, ALWAYS CLOSE TO YOU

Our Services:
• 360° Service & Support
• Innovative production solutions
• Complete trainings on production process
• Quality testing solutions
• Tailor made projects
• Raw material procurement
• Certification support
• Installation & Commissioning
• After sales support & Remote assistance

ECOPROGETTI’S AWARDS
• Machinery technology Excellence 2021 by Solar quarter awards.
• Intersolar Award 2018 with the 1st LED sun simulator for Bifacial modules.
• Gold award winner 2018 and 2019 as Manufacturing line Setup by Solar PV Module Tech India.
MONITOR YOUR PV PANEL QUALITY

A strict quality control at every stage of the production process ensures higher energy yields of the panels over a long life span.

**Fully automated EL Tester**
- AUTO CONTACTING SYSTEM
- AUTO DETECTION SOFTWARE

**Fully automated LED sun simulator A+A+A++**
- IEC 60904-9 ED.3 COMPLIANT
- PATENTED
- SUITABLE ALSO FOR BIFACIAL MODULES

**Automatic Cell tester**

**Automatic HI-POT tester**
- INSULATION MEASUREMENT

© ECOPROGETTI Srl, All rights Reserved
MONITOR YOUR PV PANEL QUALITY

MANUFACTURING EQUIPMENT FOR SOLAR PANEL PRODUCTION

GLASS LOADER  FOIL CUTTER  STRINGER  LAYUP

BUSSING  EL TESTER  LAMINATOR  BUFFER

TRIMMING  FRAMING  J-BOXES  LABELLING

HI-POT  SUN SIMULATOR  PACKING  ACCESSORIES

...AND MUCH MORE...

ALL MACHINES ARE DESIGNED & MANUFACTURED IN ITALY
CONTACT US

ECOPROGETTI ITALY -Headquarters
Via dell’Industria e dell’Artigianato 27/C, 22/D
35010 Carmignano di Brenta, PD, Italy
Contact Person
Managing Director: Mrs. Laura Sartore
Tel.: +39 049 7444 900
Mail: sales@ecoprogetti.com
Website: https://ecoprogetti.com

ECOPROGETTI INDIA
302, Regal Industrial Estate, Plot No 238,
Acharya Dhonde Marg, Sewree, Mumbai- 400015,
Maharastra State, India
Contact Person
Managing Director: Mr. Rajen Shah
Tel.: +91 982 0068 331
Mail: rajen.shah@ecoprogetti.com

ECOPROGETTI USA
All4-GP North America Inc.
345 Mira Loma Avenue, 91204 Glendale, CA, USA
Contact Person
Sales Manager: Mr. Matt Gansen
Tel.: +1 (303) 501 7683
Mail: matt.gansen@all4-GP.us

ECOPROGETTI MEA
A-4 SAIF Zone, Sharjah - UAE
Contact Person
Mr. Wajih Walhazi
Tel. +39 389 0949 636
Mail: sales@ecoprogetti.com
Wajih.Walhazi@ecoprogetti.com

ECOPROGETTI South East Asia
Elitech Trading Corporation
2nd Flr. Hakko Bldg., 1st St. Cor. 3rd St,
United Parañaque Subd5, San Isidro, Sucat,
Parañaque City,
Philippines 1700
Contact Person
Sales Manager: Mr. Jess Kristoffer
Tel.: (+632) 829-2295
Mail: jess@elitech.com.ph